

UTAH DEPARTMENT OF TRANSPORTATION

TRAFFIC OPERATIONS CENTER

MONTHLY REPORT **APRIL 2003**

2060 South 2760 West, Salt Lake City, UT 84104
 Phone: 887-3700 Fax: 887-3797 www.commuterlink.utah.gov



Field Devices Summary

Freeway Closed Circuit Television (CCTV)	163
Surface Street CCTV	32
Dial-up CCTV	35
Total CCTV	230
Freeway VMS	42
Surface Street VMS	17
Portable VMS	2
Total VMS	61
HAR (5 deployed, 5 portable units)	10
TMS	231
RWIS	52
Connected Traffic Signals	613
Connected Ramp Meters	23

Operations Summary

VMS Messages Displayed	103
Signal Timing Calls	19
Signal Maintenance Calls	329
New Work Orders	411
Incident Responses	479
Website Visitor Sessions	62,761
511 Calls	20,864
Email Alerts Sent	533
CommuterLink Questions	14

TOC Employee of the Month



Billy Frashure – Incident Management Team



The Traffic Operations Center was host to a delegation from New Mexico.

KUDOS!

Kudos goes to UDOT's Denny Simmons and the TOC staff for getting the new amber alert system up and running in a short time...

Paul Murphy
 Utah Attorney General's Office

TOC Mission

1. To Support UDOT and the Department of Public Safety in Improving Highway Safety.
2. To Help Provide Reliable and Efficient Travel.
3. To Provide Useful and Timely Real-time Traffic Information.
4. To Work Together with Other Government Agencies to Serve the Public.
5. To Provide Excellent Customer Service.

ACTIVITY HIGHLIGHTS

TOC Activities

This Month

1. A Scanning Tour hosted by Dave Kinnecom was held for a group from New Mexico. The group consisted of several city, county, state, and federal officials, who are very interested in the UDOT TOC as they are planning to build their own traffic center. The group was very appreciative for the opportunity, and to find out first hand how several agencies, which were at one time independent from each other, can be united to work collaboratively.

2. Martin Knopp, ITS Division Director, has announced that he will be leaving the Department to take a position with the Federal Highway Administration. Martin has been with UDOT for four years and played a key leadership role in the development and deployment of ITS technology prior to and following the Olympic effort. He helped form the ITS Division and has been instrumental in the development of the CommuterLink Web Site, the 511 technology and marketing benefits of ITS to the public and other agencies. Martin's new responsibilities will include serving as a team leader for operations to



Snapshots from Martin Knopp's farewell bash.

help unify FHWA Resource Centers and assist in providing better services to states. We expect to have the opportunity to work him frequently in his new assignment.

3. Colonel Claron Branchley, of the Department of Public Safety, brought a youth group through the TOC. Colonel Branchley is the Division Director for the Department of Public Safety. TOC Control Room Manager Denny Simmons hosted the tour. The youth were able to see the various functions of the TOC from the Signal Lab to the DPS Dispatch Center.

4. The quarterly CANAMEX Corridor Coalition (CCC) meeting was held at the TOC during the month of April. The CCC has the responsibility of managing the development and implementation of the CANAMEX Corridor Plan. When complete CANAMEX will be a continuous four-lane highway from the Mexico City to Edmonton Canada. This corridor will be used to move goods, people, services, and information. The Corridor traverses 5 U.S. states: Arizona, Nevada, Utah, Idaho and Montana. The Governors of each state have signed a Memorandum of Understanding outlining their intent to work together. In addition, each state assigns a private as well as public sector representative to participate in the CCC. For more information concerning the CCC visit <http://www.canamex.org>



ATMS Improvement and Expansion Activities

The following is a list of many of the projects that have either been completed, or are currently underway:

Region 1:

- Fiber is currently being installed from Lagoon to Hill Field Road. This project will provide a connection from the Region 1 Headquarters to the TOC.
- The Ogden Signal System is currently being upgraded to ICONS.
- A Traffic Signal UPS (Uninterrupted Power Supply) has been installed in Wellsville. This UPS will assure power supply connection to this sensitive, high-profile signal. The TOC Electronics Lab has been asked to help in the final connection of the UPS.



Region 2:

- An Olympic Camera Relocation Project is in progress. This project involves relocating cameras that were used temporarily for the 2002 Winter Olympics. They are being re-located to more strategic locations for day-to-day use, such as SR-201 and 8400 West.
- The ITS division has finished adding several ATMS-related requirements to an RFP that will be issued for the reconstruction of SR-201 between 900 West and 5600 West. The comments include the relocation of fiber-optic communications to the TOC and the UDOT complex, as well as the addition of ramp meters and trailblazers at several locations.
- The Wendover and Perry Ports of Entry are having remote-activated, solar-powered flashing beacons installed on their "Port Of Entry Open (Closed)" signs. This will enable the Ports of Entry to turn on the flashers without having to travel to the signs.



Region 3:

- With the equipment list now complete, Region 3 has begun to order the necessary components for their ATMS Interconnect Project. This communications equipment will provide the Region 3 headquarters with a dedicated ATMS connection to the TOC and Utah County devices.
- Twelve cameras and six TMS sites are currently being installed in various locations within Region 3.

Region 4:

- Plans and preparations continue to be made for the placement of an ICONS server at the Region 4 Headquarters and in St. George. The ICONS server will be used for both UDOT and St. George City signals.

Acronyms

ATMS Advanced Traffic Management System

CCTV Closed Circuit Television

DPS Department of Public Safety

HAR Highway Advisory Radio

RWIS Road-Weather Information System

NTCIP National Transportation Communications for ITS Protocol

TMS Traffic Monitoring Station (count station)

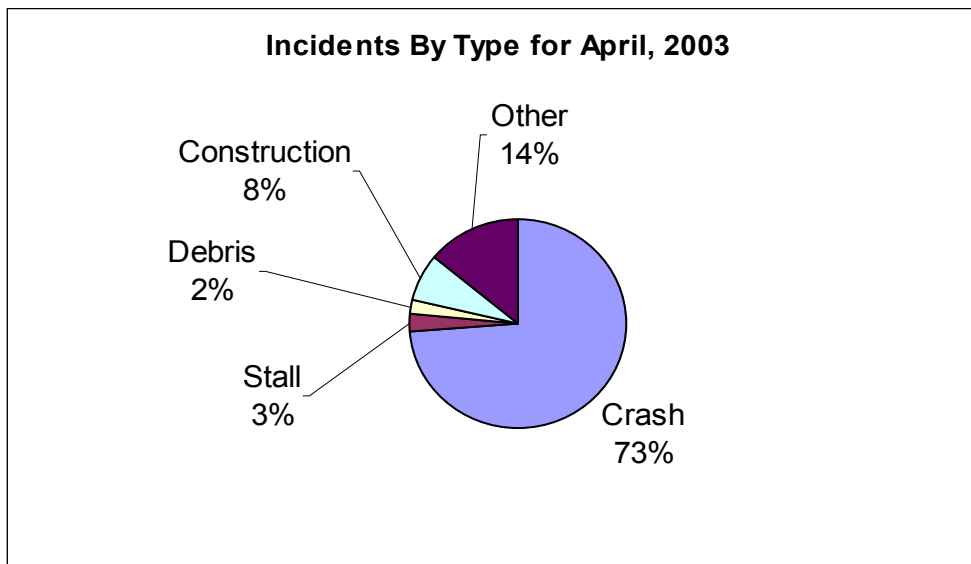
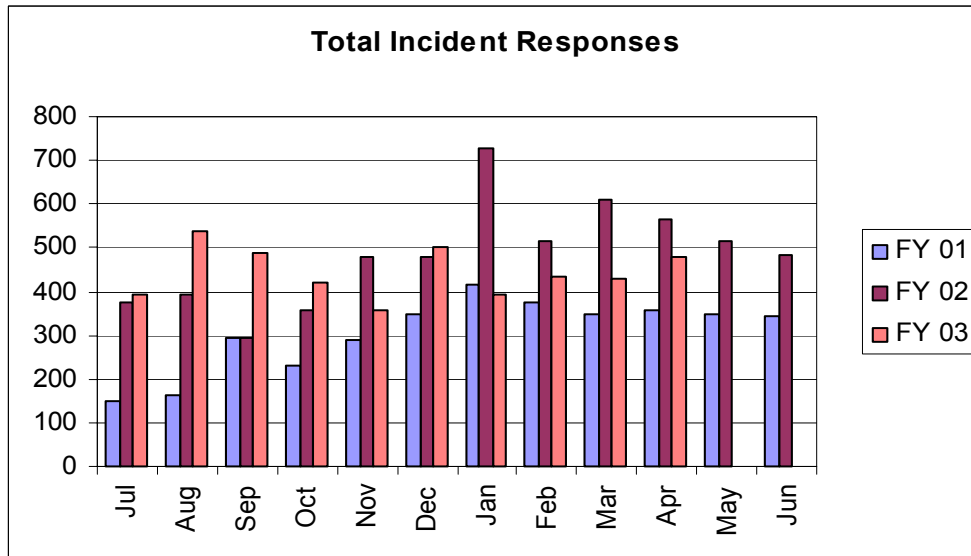
TOC Traffic Operations Center

TTI Travel Time Index

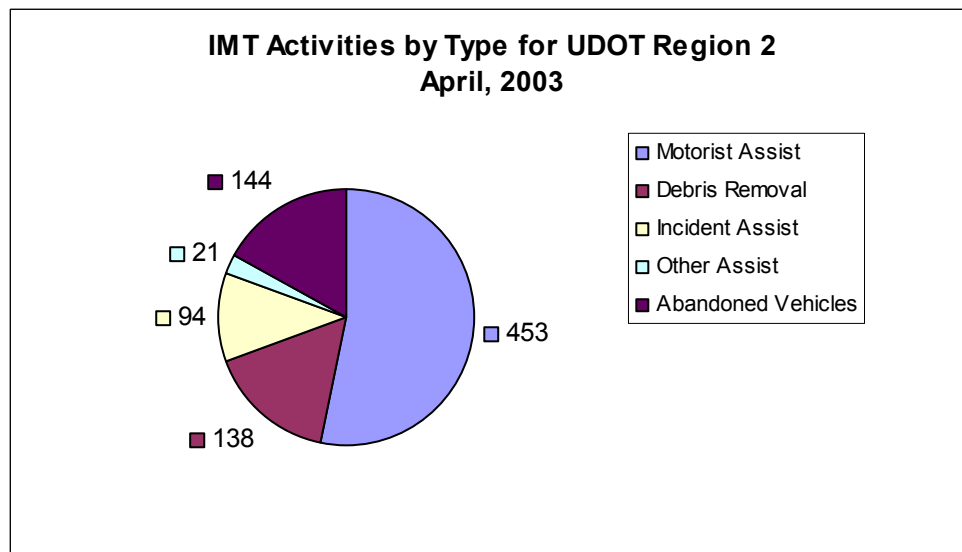
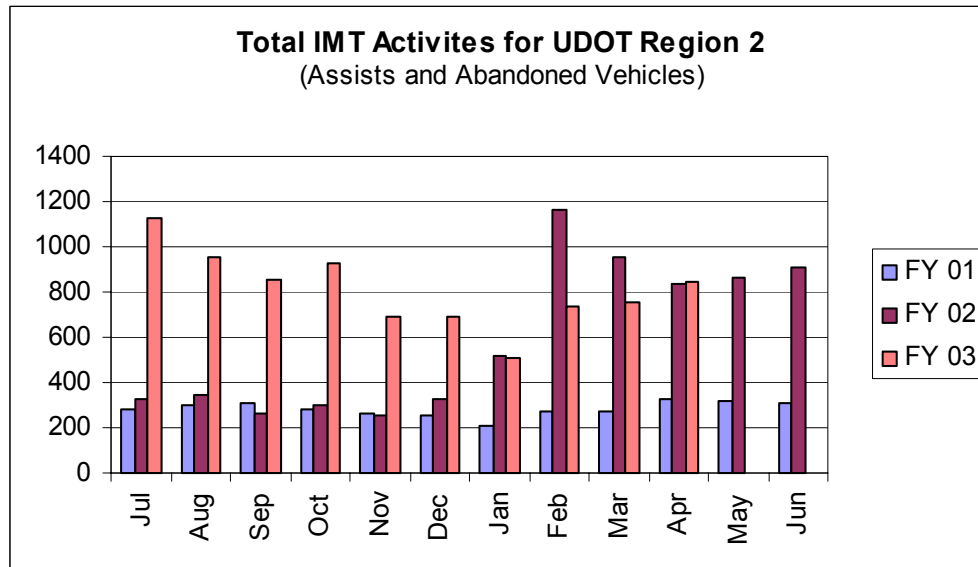
VMS Variable Message Sign

Safety

An incident response is an incident recorded in the ATMS system. These can be of several types, including crash, construction, debris, stall, congestion, or other. Each time an incident is created information is sent to the 511 system, the website, and email alerts are generated.



Region 2 Incident Management Team (IMT) Activities



Freeway Flow

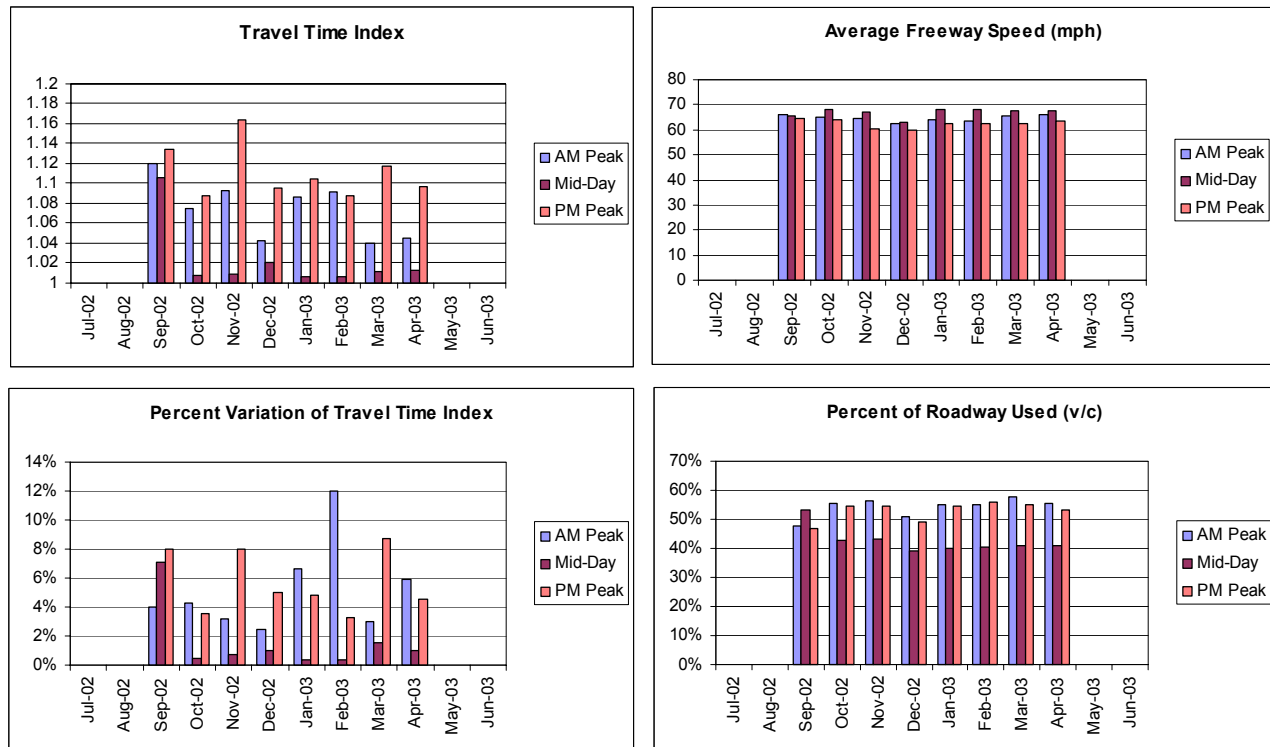
Freeway flow measures are taken from the Traffic Monitoring Stations (TMS) located throughout the Salt Lake Valley. As more TMS sites are installed throughout the state, they will be included in these performance measures.

Travel Time Index: This measure of mobility is based on freeway speeds and is weighted by segment lengths and by the traffic volume. A value of one (1) represents free-flow speeds. A value of 1.12 indicates that the average vehicle trip takes 12% longer than if that were the only vehicle on the freeway.

Percent Variation of Travel Time Index: The percent variation in the Travel Time Index is a measure of how much the Travel Time index changes from day-to-day.

Average Freeway Speed: The Freeway Speed is weighted by volume.

Percent of Roadway Used: The percent of roadway used is the ratio of the volume on the segment to its capacity. This is otherwise known as the volume to capacity ratio, or (v/c).



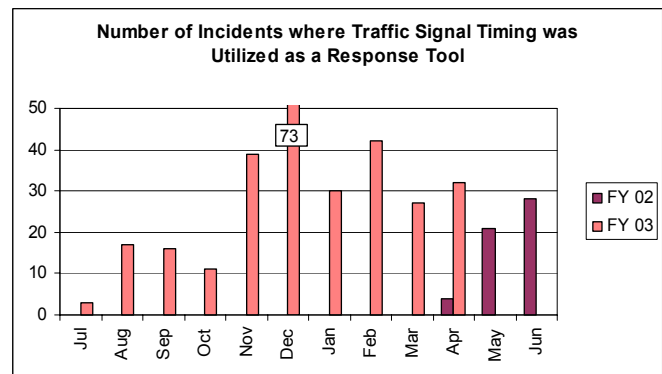
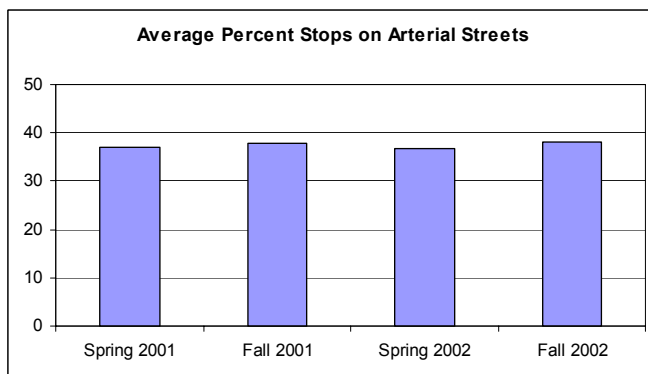
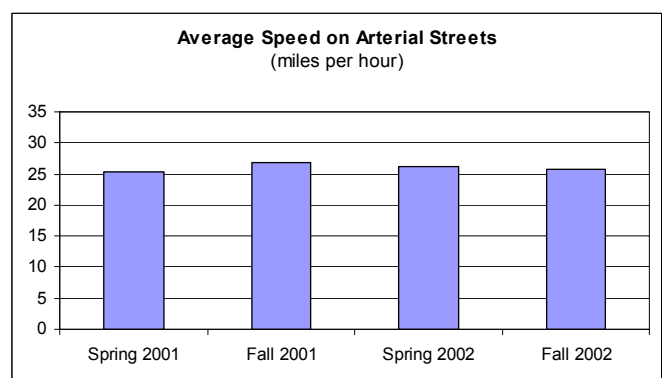
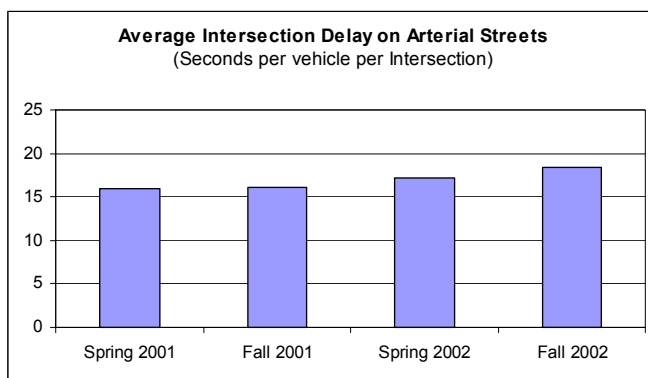
The 6 links with the highest average Travel Time Index for the month are:

Segment	Period	Avg Of TTI
I-15 NB from 600 N to I-215 W	PM Peak	1.43
I-215 S WB from Knudsen's Corner to I-15	AM Peak	1.28
I-15 NB from 600 S to 600 N	PM Peak	1.17
SR-201 WB from I-215 W to 7000 W	AM Peak	1.14
I-215 S WB from Knudsen's Corner to I-15	PM Peak	1.14
SR-201 WB from I-15 to I-215 W	PM Peak	1.11

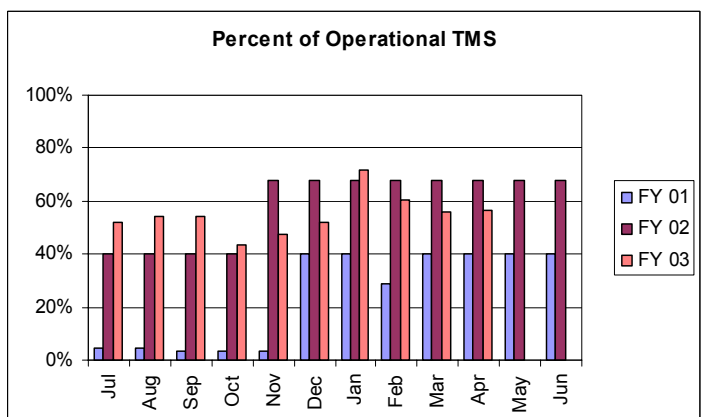
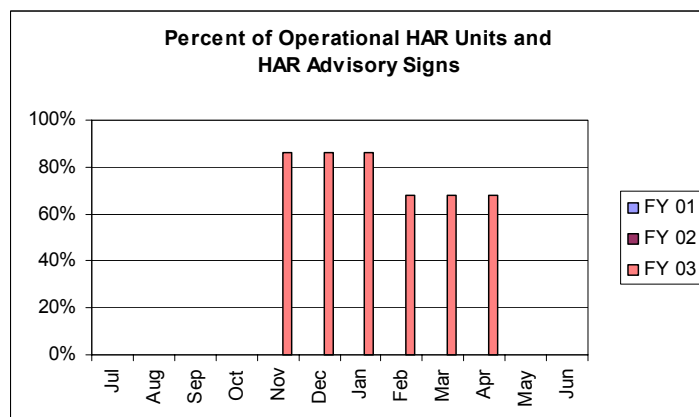
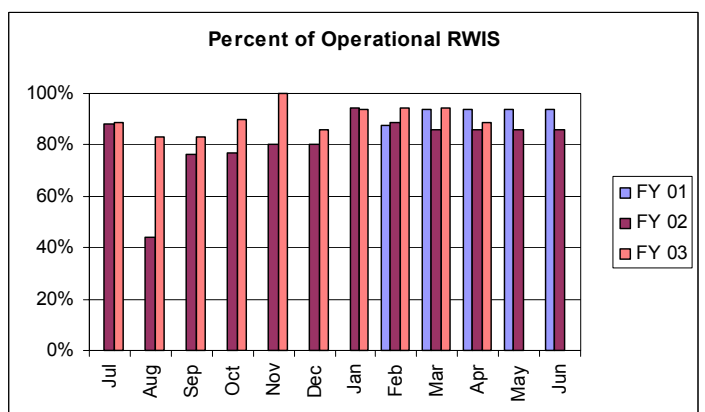
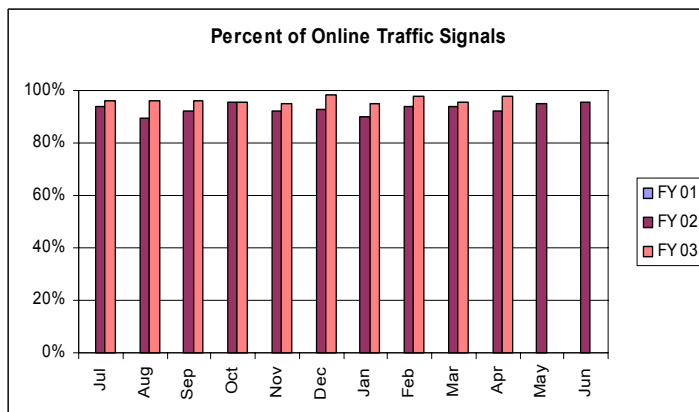
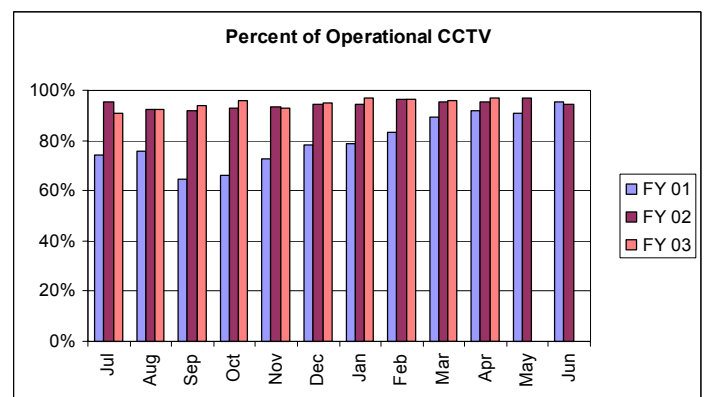
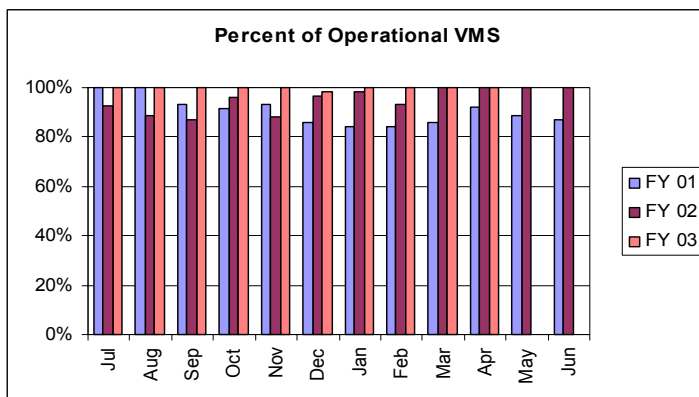
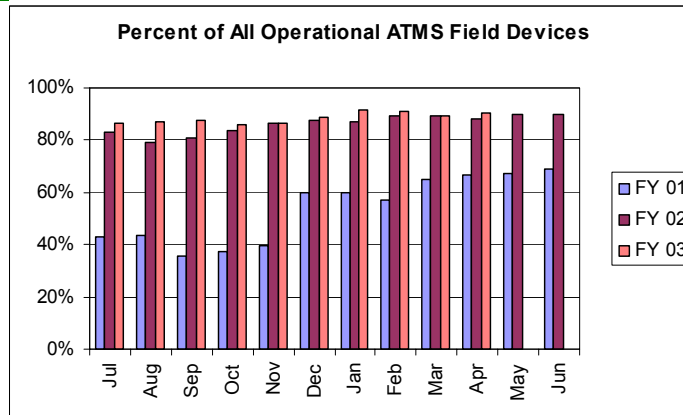
Surface Street Flow

The surface street statistics are generated through a series of Travel Time measurements. Much can be learned through several runs along a corridor, including the average travel time, the average percent of intersections at which a vehicle must stop, the average time stopped at an intersection, and the average speed. The Statewide Timing group gathers these measurements from Regions 1-4 twice each year. The chart in the lower right corner shows the number of incidents where traffic signal timing was modified in order to help traffic flow around closed lanes, or to help flush out excessive congestion.

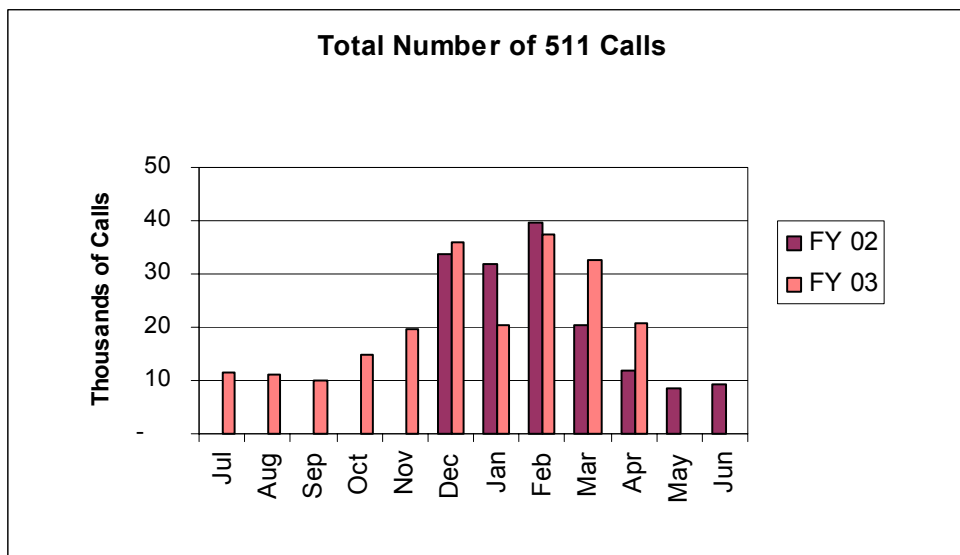
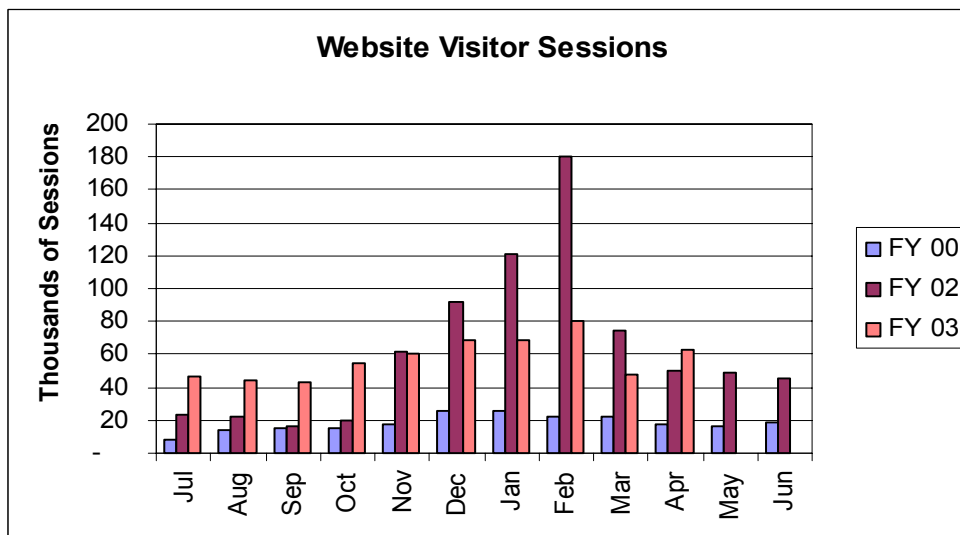
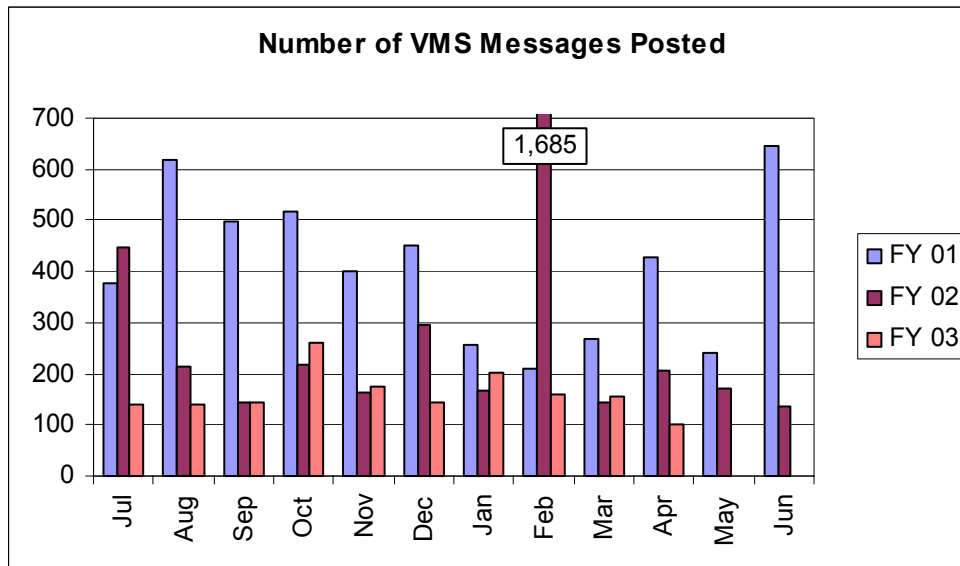
Since the data is gathered semi-annually, this monthly report will provide charts for the Statewide Average.



Maintenance

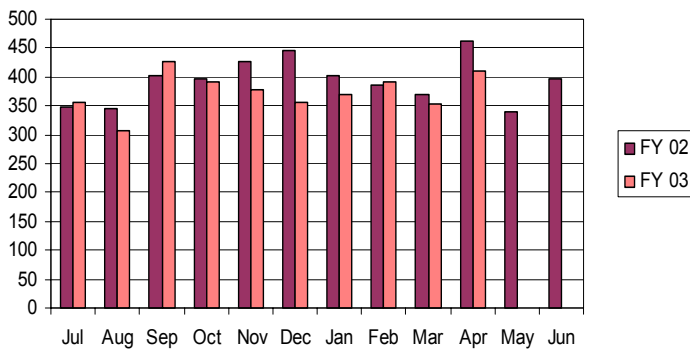


Traveler Information

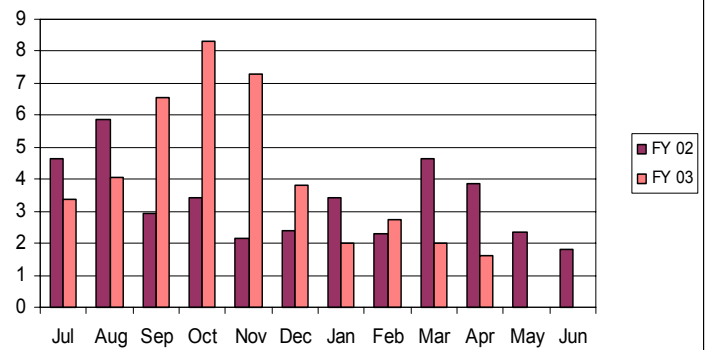


Customer Service

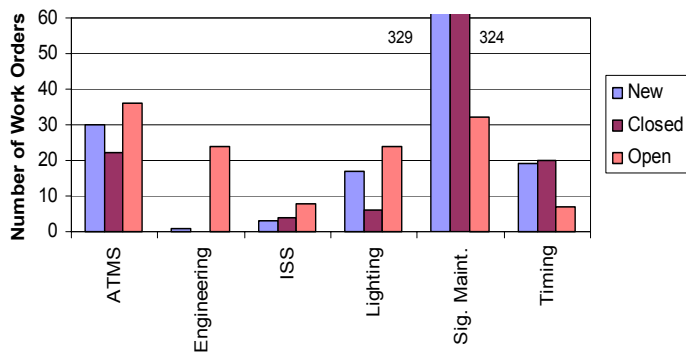
Number of New Work Orders



Overall Average Work Order Turnaround Days



Work Order Status by Group



Work Order Status for All Groups for FY03

